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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,671	12/24/2003	Kia Silverbrook	NPB008US	7891

24011   7590   08/10/2007
SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER
LE, KHANH H

ART UNIT	PAPER NUMBER
3622	

MAIL DATE	DELIVERY MODE
08/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/743,671	SILVERBROOK ET AL.
	Examiner	Art Unit	
	Khanh H. Le	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07/23/2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 8-11* is/are pending in the application.

  4a) Of the above claim(s) *8-11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   This Office Action is responsive to the Correspondence filed 07/23/2007. A request for
continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was
filed in this application after final rejection. Since this application is eligible for continued
examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid,
the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
Applicant's submission filed on 07/23/2007 has been entered.

2.   Claims 1-4, 8-11 are now pending, with claims 8-11 withdrawn, claims 1-4 now
examined. Claim 1 is amended. Claim 1 is independent.

Response to Arguments

3.   Applicant's arguments filed 07/23/2007 as well as previous arguments have been fully
considered but they are not persuasive.

4.   Applicants agree Dymetman teaches the page identity has to be associated with a
description of each input element on a page but argue Dymetman fails to teach when or how this
step is performed. Thus the current amendment consists of adding the proviso that the
association step d) has to be performed before printing step h).

        Applicants argue:
        *"By contrast, the present invention makes this association in step (d) before any printing
steps have been performed. This is a key difference between the present invention and
Dymetman, because it allows fully interactive pages to be printed on demand."*

5.   In response:

        5a)   This is improperly attacking DYMETMAN individually while the rejection uses
Ur as secondary reference to teach on demand printing, on demand printing being printing of
visible and invisible codes on the page at the same time.

        5b)   Explicit support for the proviso has been not been found in the specification of the
instant application, that of the parent, or by searching the applications incorporated by reference.
(This was mentioned in Advisory Action, mailed 07/10/2007, (herein Advisory), at page 2).

If the proviso is not inherently needed for printing interactive papers which is the subject of the instant invention, then the proviso is new matter and all claims would be rejectable under 35 USC 112, 1st paragraph.

However it seems reasonable that the proviso is needed i.e. inherent. It seems reasonable that some association of a page identity with a description of each input element on a page has to be made before printing for the printer to print them and allow the interactive functionality. For example, in DYMETMAN, both the page identity (page-id) and description of each input element on a page (pointer-loc) are printed on the page to allow a pointer to send the unique information represented by the pair to be interpreted over a network (page 393, last paragraph). It seems, to be both printed on the same page, their association has to be made before printing.

It seems Applicants agree to this inherency:
"Presumably, Dymetman conceived that all the coded data comprising page-id and pointer-loc information is predetermined before printing. This predetermined coded data is then sent to a printer for printing, thereby generating one of Dymetman's coded 'blanks'." (Response on 04/26/2007, page 5, paragraphs 4-5).

Thus the Examiner concludes the proviso is inherent, in DYMETMAN, as well as in Applicants' invention, and therefore there is implicit support in Applicants' disclosure. Thus a 35 USC 112, 1st paragraph rejection is not warranted.

5c)   However, by the same token, as shown above, and admitted by Applicants in the quote above, the same association before printing is implicit in DYMETMAN at page 393, last paragraph.

5d) Applicants further argue: *" Moreover, even if the Dymetman were to adopt the teaching of Ur, there is nothing in Ur teaching the skilled person to make an association between a zone of an input element and a page identity prior to printing."*

Ur does not need to teach that as DYMETMAN already teaches it (see 5b-c above). Further, Ur, (at e.g. col. 6 line 55 to col. 7 line 3) also teaches association before printing, of codes or instructions to allow printing visible data and coded data simultaneously (i.e. on demand printing). Thus DYMETMAN in view of Ur provide all the teachings, technical or otherwise, to allow "fully interactive pages to be printed on demand", contrary to argument.

5e) Applicants also argue:
"Given how Dymetman envisages printing his Intelligent Paper, it is must be fairly assumed that Dymetman makes this association after all the printing steps have been performed" and
"By contrast, Dymetman would require a manual post-printing association to be performed, which means his interactive pages cannot be made available on demand."

Again these are all improper attacks on DYMETMAN individually. DYMETMAN in view of Ur teach allowing fully interactive pages to be printed on demand. Applicants may have some other type of association in mind but DYMETMAN in view of Ur fully disclose the current claim language.

6.   Thus the previous rejection based on prior art is maintained and follows with some clarifications. **The responses to arguments above are an integral part of the rejection.**

Claim Rejections - 35 USC § 103

7.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8.   **Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Intelligent Paper" by M. Dymetman, and Max Copperman, in Electronic Publishing, Artistic Imaging and Digital Typography, Proceedings of EP '98, March/April 1998, Springer Verlag LNCS 1375, pp 392-406, in view of Ur, US 6072871.**

"Intelligent Paper" discloses (independent claim 1)

A method and system for providing content in a printed document or publication and for tracking user interaction with an input element on the printed publication, the method comprising the steps of :

a) determining a unique page identity for said publication (page or document) in a computer system (page 392 : unique "code page-id" for each page);

(b) identifying human-readable information for said publication (page 393, 1st paragraph e.g. Louvres in Paris map);

(c) determining a page description for said publication in said computer system, said page description (*"code page-id" at page 392)*

(Note: "page description" is not specifically defined.

**Note on the interpretation of claim terms. *Unless a term is given a "clear definition" in the specification (MPEP § 2111.01), the examiner is obligated to give claims their broadest reasonable interpretation, in light of the specification, and consistent with the interpretation that those skilled in the art would reach (MPEP § 2111). An inventor may define specific terms used to describe an invention, but must do so with reasonable clarity, deliberateness, and precision"*

(MPEP § 2111.01.IV). A "clear definition" must establish the metes and bounds of the terms. A clear definition must unambiguously establish what is and what is not included. A clear definition is indicated by a section labeled definitions, or by the use of phrases such as "by xxx we mean"; "xxx is defined as"; or "xxx includes, ... but does not include ... ".

***The instant application contains no such clear definition for the term "page description" In the instant case, the examiner is required to give the term "page description" its broadest reasonable interpretation, which the examiner judges to be any data allowing the system to correctly interpret input by user via the page. Since **"Intelligent Paper"** teaches association of "code page-id" and "pointer- loc" to achieve this, "code page-id", as part of the associative data, at least reads on "page description")*

comprising:

(i) a description of said human-readable information (page 393, 1st paragraph e.g. Louvres in Paris map);

and

(ii) a description of said input element (page 392 last paragraph : "pointer- loc") including a zone of said input element on said page (page 392 : "pointer- loc")

and

a description of an associated entity *("Intelligent Paper" discloses sending information from an entity after a request from a user is detected from the user interacting with the input element (see at least p.392-393): this implies an entity has to be associated with the input element and necessarily an identification (i.e. a description) of the entity has to be in the computing system to allow the functionality described in INTELLIGENT PAPER)*;

(d) associating said page identity with said description of said input element (pages 392-393, pair: code page-id, pointer-loc);

with the proviso that the associating step (d) is performed before the printing step h) (inherent in DYMETMAN, and admitted as necessarily true, see Response to Arguments at paragraphs 5b-5c above).

(e)-(h) : see below

i) receiving, (in a computer system), from a sensing device, indicating data indicative of a position or movement of the sensing device relative to the printed publication said indicating data being generated by the sensing device using sensed coded data (page 392, pair: code page-id, pointer-loc; page 393, 1st and last paragraphs; ; page 2, 2nd full paragraph, the intelligent paper is equivalent of touch sensitive screen...)

(j) identifying from the indicating data (data derived from interacting with the pair code page-id -pointer-loc ; page 393, 1st and last full paragraphs) and the page description (page 392, code page-id) whether the user has selected the input element using the sensing device (page 392,from detecting interaction with pair: code page-id, pointer-loc), and if so notifying an associated entity of the selection (Intelligent Paper" discloses sending information after request from a user interacting with the input element over a computing system (see at least p.392-393): notification is implied to effect the sending step).

Printing Steps (e)-(h):

Applicants had agreed that INTELLIGENT PAPER teaches printing both human-readable information and coded data in either of 2 ways (1) printing a coded blank substrate and then overprinting with human-readable information in a subsequent printing step *; or (2) printing human-readable information and then overprinting with coded data in a subsequent printing step. "* (Response 01/08/2007, page 5 next to last paragraph). Further Applicants no longer argue, as before, that the same party cannot do both printing.

Indeed, INTELLIGENT PAPER teaches printing both coded and human readable data, (page 399 1st paragraph; page 393,last paragraph: the coded data being invisible; page 392-393, last paragraph, and Fig. 2, p. 396: coded data on surface of paper).

Thus INTELLIGENT PAPER also discloses a method for printing a publication including:

(e) generating, in a printer, first dot data for coded data using said page identity, said coded data identifying said page identity and a plurality of positions on said publication (page 392, pair: code page-id, pointer-loc);

(f) generating, in a printer, second dot data for said human-readable information using at least part of said page description;

***(*Note: Applicants had earlier argued (Response on 04/26/2007, page 5, paragraphs 4-5) that Dymetman does not teaches" step (e). This challenge has been responded to in the Advisory mailed 7/10/20, (herein Advisory), apparently to Applicants' satisfaction because the point is no longer argued.* **All the responses provided in the Advisory are herein incorporated by reference as part of this rejection).**

9. However, INTELLIGENT PAPER does not disclose printing both types of data, simultaneously. That means INTELLIGENT PAPER does not disclose:

(g) compositing the first and second dot data; and

(h) printing the publication <u>wherein the coded data is printed at the same time as printing the human-readable information</u> using the composited dot data.

10.   **However Ur discloses:**

generating in a printer first dot data for coded data (Fig 2 item 27: coded data; col. 4, lines 41-47)

generating second dot data for human-readable information (Fig 2 item 23: human-readable data)

g) compositing the dot data in a printer prior to printing (col.4 lines15-18: instructions for printing in the printer, allowing printing both types of data simultaneously, **col. 4, lines 41-47,** read on "compositing");

h) printing interactive publications (col. 4 lines 30-34: interaction with scanners) **on demand** (col. 4 lines 1-3) <u>with human-readable information and coded data being printed at the same time</u> **(col. 4, lines 41-47).** (This reads on "*wherein the coded data is printed at the same time as printing the human-readable information using the composited dot data*").

<u>Since INTELLIGENT PAPER teaches printing both types of data (visible and coded) (p. 399 1st full paragraph),</u> **it would have been obvious to one skilled in the art at the time the invention was made to add the Ur's teaching of printing simultaneously both, to INTELLIGENT PAPER, <u>to allow faster printing.</u> In view of the level of skill evident in the references, one of ordinary skill, at the time of the invention, would have known to combine the technologies disclosed to produce the claimed invention.**

11.   **INTELLIGENT PAPER also teaches** (claims 2; and 4) the associated entity is a publisher or its computer system. (e.g. page 393: owner of the Paris map content) ;(claim 3) the input element is a hyperlink (p 392, next to last paragraph, "clicks" connotes a hyperlink).

Conclusion

12.   This is a continuation of applicant's earlier Application. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
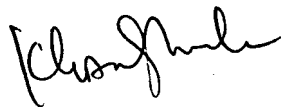
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
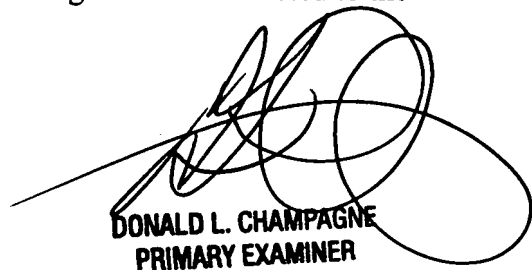
13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh H. Le whose telephone number is 571-272-6721. The Examiner works a part-time schedule and can normally be reached on Tuesday-Wednesday 9:00-6:00.

        If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Eric Stamber can be reached on 571-272-6724. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-3600.

August 1, 2007

Khanh H. Le

DONALD L. CHAMPAGNE
PRIMARY EXAMINER